inVIZ® MATRIX

The unifying one box platform for all your RVI inspection needs

INVIZ® MATRIX delivers in one box high resolution digital image presentation, easy touch screen and joystick systems control and excellent multi functional data management

PW03-013_1-0

viZaar industrial imaging AG

Existing analogue video documentation
Existing inspection equipment assets
VISIO BOX and VISIO probe systems
INVIZ® RVI product range
Future inspection equipment
Multible I/O
Touch screen, digital high resolution, image display, joystick, camera control, text and data control
Defined processes
Sort data
Add graphic, text, audio
Digital video sequences or images
Data storage system

The unifying one box platform for all your RVI inspection needs

Connectivity › Image presentation › Analysis › Documentation › Communication › Data storage

Multi purpose use and functionality instead of single stand alone solutions. Remote visual inspection equipment is typically limited to use to a limited range of applications. Different physical requirements call for investments into different tools. Inspection data is often landing in different formats at different systems. Finding the right images, film and data and getting it together for a consolidated report is time consuming and costly. Data integrity, Documentation and data storage is becoming a night mare. The new INVIZ® MATRIX platform from viZaar is a end to all the above. A single platform that is dealing with your existing RVI data and systems as well as offering a one hub to a range of inspection equipment starting at micro fibre endoscopes for miniature valve inspection and ending with pan and tilt cameras to visualize and inspect big vessels via a hand hole.

Connectivity of the INVIZ® MATRIX platform

Control and utilize any INVIZ inspection camera

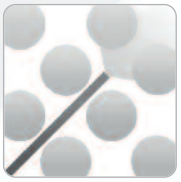
INVIZ® SNK pan & tilt, INVIZ® Revolver 80 dual revolving camera, big push camera systems, INVIZ® tube inspector will perfectly be controlled by the touch screen and Joystick of the unit while you get the unbeatable image and software performance known from the industry leading INVIZ® VUMAN® Videoendscope concept.

Remote Visual Inspection of big volumes

:: INVIZ® SNK pan-tilt-zoom camera
:: INVIZ® Revolver 80 dual camera
:: INVIZ® Pipe camera

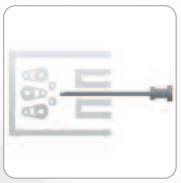
Remote Visual Inspection of medium volumes

:: INVIZ® BIG



Remote Visual Inspection of small spaces

:: INVIZ® DE 2.4mm
:: VISIO probe videoendoscope range 3.7mm, 4mm, 6mm, 8.5mm



Complete the full range of inspection equipment working from and saving into one MATRIX system

Connect all of the high quality VISIO Video endoscopes starting from 3.7mm, 4mm, 6mm, 8mm utlizing the VISIO BOX high performance power and light adapter box.

Convert and edit existing analogue inspection data such as video records

Analogue to digital conversion any format (PAL/NTSC) to digital video in MPEG or AVI, and still images in JPEG or BMP.

Connect directly any of your other existing video inspection equipment

Any other standard signal providing camera oder Videoscope type product. Convert instant to digital and make use of the high resolution digital image and storage capabilities. Find all data loos free at one space.

Image Presentation > Analysis Communication & Documentation > Data storage

Use all image manipulation and editing features for your digital inspection videos and images.

Image Presentation

Benefit of the high resolution digital image presentation on the interactive INVIZ® MATRIX touch screen display which is nicely integrated in the box and tilts up easily. Releasing the fast lock, the display comes out of the box to become a full featured remote control. Existing data will be easy at hands utilizing a well structured file system and thumbnail content presentation.

Analysis

Simple graphic user interface allows the activation of digital image enhancement tools. Zoom into the area of interest, center the area of interest, image rotate, flip and mirror to improve and enhance the data you analyze. A free hand arrow will point clearly out what is important. Use position unbound reference charts or images. Free text will finally conclude the analysis turning data into valuable information.

Communication & Documentation

Protected by a four digit key, nine different user profiles separate and secure your valuable data and help uploading predefined text windows accelerating the workflow. Using your individual file names ensure clear file structures and easy storage. Thumbnail content presentation is helping fast data search. Digital images can be stored in different resolution and contain graphics, text and voice command. Images and video files are Windows® compatible for easy sharing and post processing with standard Windows programs.

Data storage

Data can be stored internal and external. Up to 60 hours of high resolution digital video or thousands of digital images can be saved onto the internal robust SSD drive.Connecting any USB storage device, the internal data can be moved, back ups created or live data directly be saved on the external device. Data size can be selected for maximal resolution or minimal data if perhaps transferred via mobile phone.

The protective foil ensures a clean display, protecting the LCD touch screen from dirt, moist etc., scratches and other damage.

Control the pan & tilt movement of the INVIZ® SNK and INVIZ® Revolver 80 with precisely adjusted joystick.

Perfect documentation onto the robust and large SSD drive. Stores hundreds of digital videos or millions of high resolution images.

Easy to use and mobile control panel with high resolution 10.4" LCD touch screen. Perfect image quality with 1024 x 768 px touch screen, full text generation, easy digital still and video recording, file management at the touch of your finger.

1024 x 768
High-Resolution

Digital videos and images for error analysis and processing are saved in full resolution (loss-free), 32 bit depth. Up to 60 hours full resolution recording can be quickly transferred via the two USB interfaces. Standard digital documentation allows easy communication of results in multible digital formats and resolution (JPG, BMP, MPEG or AVI). The filing system with the instant preview function delivers immediate access to results. Comparison with reference cases is simple, thanks to the smart file management system with "Zoom By Move Over" picture gallery. Other equipment or older video recordings can be connected and digitally recorded onto your intuitive to use INVIZ® MATRIX.

Help on board: Never get lost with the complete and detailed user manual installed as E-Reader on your INVIZ® MATRIX documentation system. Quickly find the desired page or topic.
In case of difficult situations during your inspection, your INVIZ® MATRIX keypad offers one-click direct access to the most frequently used features such as snapshot and recording. Digital image processing ensure detailed, true colour images for accurate assessment and decision making. Details can be highlighted with the zoom, rotate, flip or mirror function for accurate image presentation.

The adjustable, high resolution 10.4" transreflective screen (1024 x 768 px) provides detailed images for analysis both indoors and outdoors. Observation notes can be added using the touch screen keyboard and an external VGA output allows transfer of images to additional monitors or other locations.

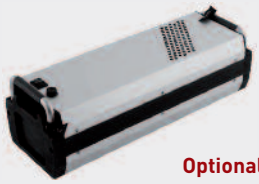
INVIZ® MATRIX provides you with the new backup system of your data and user settings. Create individual backup files to reduce data loss. The new feature „system shutdown" enable system shutdowns from any menue. To stay operational, your INVIZ® MATRIX provides the „auto scan and repair" feature for on-site operations.

Three different docking bays allow operations with a battery or power supply and enable to connect the INVIZ® SNK and INVIZ® Revolver 80 inspection systems with the INVIZ® MATRIX.

Made in Germany

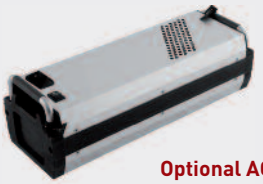
INVIZ® SNK camera head

INVIZ® Revolver 80 camera head



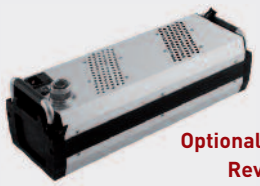
Optional battery pack

Optional high capacity rechargeable NiMh battery provides full mobility and retains capacity and performance even under the harshest conditions.



Optional AC power pack

Optional multi AC voltage input 96 VAC - 256 VAC.



Optional INVIZ® SNK / Revolver 80 pack

The power to drive big tank and vessel inspection systems such as INVIZ SNK and INVIZ Revolver 80 up to 80 meter cable length.

The INVIZ® MATRIX docking bay concept

Offering three different docking bays for battery operation when no power supply is given, a standard power supply adapter and a special INVIZ® SNK / Revolver 80 adapter for operations with both inspection systems.

The INVIZ® MATRIX enables you to connect the complete INVIZ® inspection series.
Control, visualize, edit and archive using just one box : the MATRIX.
The INVIZ® SNK or INVIZ® Revolver 80 simply connect just with one cable with length up to 80 meter. All functions such as pan & tilt are controlled via the MATRIX. Enjoy excellent Image quality, add audio and text commentary via headset, flip or mirror, zoom, etc. your inspection results with variable video and image quality known from the INVIZ® VUMAN® RA-Y's extensive editing capabilities.

If you have old analogue inspection recordings, previous INVIZ® inspection systems or endoscope equipment with analogue signals, the INVIZ® MATRIX will offer you the prefect solution: Connecting, recording, converting, editing, saving and archiving on the SSD or USB device will be executed seamlessly via the graphic user interface.
All data will be stored in a one box system.
Time consuming editoring and switching of inspection systems is no longer required.
Staying mobile with the INVIZ® docking bay concept offers multiple power options for independent operation.

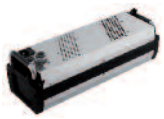
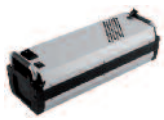
INVIZ® MATRIX

Dimensions in mm / inch	(W) 540 / 21.26" x (H) 290 / 11.41" x (D) 400 / 15.74"
Weight	9,26 kg / 20,37 lbs
Environmental Specifications	Operation temperature 5°F to +118°F (-15°C to +48°C) | Storage temperature -13°F to +150°F (-25° to +65°C) | Relative humidity max. 95%, non condensing
AC input	96 VAC – 256 VAC / 47Hz – 63Hz / max. 100 Watt (max. 220 Watt with optional INVIZ® SNK and INVIZ® Revolver 80 pack)
Housing	Impact resistant HDPE/HWU plastic, aluminium profile with plastic edge protection
Video input	PAL or NTSC composite and S-Video, auto detecting
Video output	Analog VGA PC to monitor connector (Resolution 1024 x 768), worldwide standard
Connectors and outlets	USB 2.0, recording remote control, 12VDC / 500mA Aux-Out, optional Composite and S-Video output (PAL and NTSC)
System memory	Up to 60 hours of high resolution MPEG4 video-recording or several thousand BMP and JPG high quality images

LCD control panel

Dimensions in mm / inch	(W) 320 / 12.6" x (H) 30 / 1.18" x (D) 230 / 9.06"
Weight	1,3 kg / 2,85 lbs
Mounting	Base Unit: integrated recording | Portable: shoulder harness
LCD monitor	10,4" LCD, contrast 1200:1, 400 cd, transreflective LED illumination, 262.144 colors, viewing angle all directions +/- 90°
Operation	Resistive touch screen incl. five direct access buttons and joystick
Housing	Carbon fibre design with all around elastomer bumper; power cable 2,5 meter (8,2 ft)
Features	Saving pictures and movies in low, medium and high resolution. Unlimited video recording. Full version file manager (create, copy, delete, rename files and folders). Includes all image processing features (flip, mirror, rotate, 8x zoom, text editing, image enhancement by long exposure 40 ms -10 sec., image filtering, contrast enhancement, brightness, full screen mode and point marker feature). Full version text generator (additional 99 spaces for standard configurations, full color management for text and background). Customizable color reference charts. Enables free positioning of picture settings. Up to 9 password-protected user accounts with individual configurations. Multi-lingual user interface. Multi-lingual on-board manual.

Accessories

Option docking bay case	Dimensions in mm / inch: (W) 415 / 16.34" x (H) 465 / 18.31" x (D) 190 / 7.48" Weight: 3,25 kg / 7.16 lbs, transport case for optional docking bays.		Option INVIZ® SNK / Revolver 80 pack	INVIZ® MATRIX docking bay for connecting, controlling, recording with the INVIZ® SNK pan & tilt camera head and the INVIZ® Revolver 80 camera head. The camera connections are compatible with your existing INVIZ® camera cables up to 50m working length. Dimensions in mm / inch: (W) 342 / 13.46" x (H) 100 / 3.93" x (D) 133 / 5.23" Weight: 4.73 kg / 10.42 lbs	
Option LCD display protective foil	Highly transparent, easy to mount display cover with antireflective coating fits perfectly and protects the touch screen from any dirt and scratching, chemical substances, corrosion, destruction, or deterioration.				
Option AC power pack	Your INVIZ® MATRIX can be operated from any main power supply utilizing this docking device. Dimensions in mm / inch: (W) 342 / 13.46" x (H) 100 / 3.93" x (D) 133 / 5.23" Weight: 2.28 kg / 5.02 lbs		Option battery pack	Capacity of coldness resistent NiMh: 9 Ah, 24 Volt. Operation time: approx. 1,5 to 2 hours. Operation environment: -25°C to +45°C (-13.0°F to +113.0°F). Charging unit included. Dimensions in mm / inch: (W) 342 / 13.46" x (H) 100 / 3.93" x (D) 133 / 5.23" Weight: 2.92 kg / 6.45 lbs	

All specifications are subject to change without notice due to technical progress.

INDUSCOPE

7 Chemin de Vaubesnard
Bât. B 1er étage
91410 Dourdan
Tél : +33 (0)1 60 81 90 04
Fax : +33 (0)1 60 81 28 84
Mail : info@induscope.com
www.induscope.com

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